

## SUBSTITUTE SHEET

## CLAIMS:

and

1. A device comprising a vascular prosthesis (10) including a luminal surface (14) that defines a luminal direction, the luminal surface comprising a plurality of recesses (52, 62, 72) sized to receive at least one cell,

wherein the luminal surface comprises nodes formed of polytetrafluoroethylene, wherein the recesses are defined by nodes (44, 82) lifted from the luminal surface,

wherein the recesses are oriented at least partially along the luminal direction.

- 2. The device of claim 1, wherein the vascular prosthesis comprises expanded polytetrafluoroethylene.
- 3. The device of claim 1, wherein the luminal surface includes a scale-like texture.
- 4. The device of claim 1, wherein the recesses are sized to receive at least one endothelial cell.
- 5. The device of claim 4, wherein the endothelial cell comprises an endothelial procursor cell.
- A device comprising:

a medical device (10) adapted to be implanted in a human body, the medical device including at least one surface (14) including expanded polytetrafluoroethylene,

wherein the surface comprises nodes (44, 82) formed of polytetrafluoroethylene, and wherein the surface includes recesses (52, 62, 72) defined by nodes lifted from the surface.

- The device of claim 6, wherein the device comprises a vascular prosthesis.
- 8. The device of claim 6, wherein the recesses are sized to receive at least one cell.

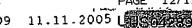


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- 9. The device of claim 6, wherein the recesses are sized to receive at least one endothelial cell.
- 10. A method comprising rubbing a luminal surface (14) of a vascular prosthesis (10) with a tool (26) to lift nodes (44, 82) formed from the luminal surface to define a plurality of recesses (52, 62, 72).
- 11. The method of claim 10, wherein the vascular prosthesis comprises expanded polytetrafluoroethylene.
- 12. The method of claim 10, wherein the tool comprises a wheel brush comprising bristles.
- 13. The method of claim 12, wherein the brush comprises bristles of at least one of metal and nylon.
- 14. The method of claim 12, wherein the luminal surface defines a luminal direction, and

wherein rubbing comprises moving the bristles in the luminal direction to cause the bristles to come in contact with the luminal surface.

- 15. The method of claim 10, further comprising mounting the prosthesis on a mandrel.
- 16. The method of claim 10, wherein the luminal surface is an outer surface of the vascular prosthesis when the vascular prosthesis is rubbed with the tool, the method further comprising everting the vascular prosthesis after rubbing.
- 17. A method comprising applying a force to a medical device (10), the medical device adapted to be implanted in a human body and including at least one surface including expanded polytetrafluoroethylene, to lift nodes (44, 82) from the surface to define a plurality of recesses (52, 62, 72).
- 18. The method of claim 17, wherein applying the force comprises rubbing the surface with a tool (26).



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- The method of claim 18, further comprising rubbing the surface with the tool in a 19. transverse direction.
- The method of claim 13, wherein the tool comprises a wheel brush comprising 20. bristles.
- The method of claim 17, wherein applying the force comprises applying a 21. pressurized fluid to the surface.
- The method of claim 21, wherein the fluid comprises one of water and air. 22.